

THE HONORABLE RICARDO S. MARTINEZ

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF WASHINGTON  
AT SEATTLE

UTHERVERSE GAMING LLC,

Plaintiff,

v.

EPIC GAMES, INC.,

Defendant.

Case No. 2:21-cv-00799-RSM

**UTHERVERSE GAMING LLC'S  
TRIAL BRIEF**

Plaintiff Utherverse Gaming, LLC (“Utherverse Gaming”) submits its trial brief in anticipation of trial commencing May 12, 2025. This brief is meant to generally guide the Court as to Utherverse Gaming’s case in chief and rebuttal. This brief does not nor is it intended to limit or waive testimony or exhibits to be elicited or presented at trial. Nor does this brief guarantee any presentation of testimony or exhibit at trial. Utherverse Gaming reserves the right to present evidence and testimony responsive to any direct or cross-examination of witnesses as trial as allowed by the Federal Rules, the Court’s Standing Order, or any other order or admonition issued by the Court.

1 **I. INTRODUCTION**

2 **A. SUMMARY OF THE DISPUTE**

3 This is an action for patent infringement brought under the patent laws of the United States,  
4 including 35 U.S.C. § 271 *et seq.* This dispute involves a single patent: U.S. patent number  
5 9,724,605 (the “’605 Patent”), entitled “Method, System and Apparatus of Recording and Playing  
6 Back an Experience in a Virtual Worlds System.” The inventions embodied in the ’605 Patent  
7 were conceived of by Brian Shuster and Aaron Burch while working for Utherville Digital, Inc.,  
8 a Vancouver, British Columbia company.

9 Epic Games is a video game and software developer that publishes *Fortnite*—an online  
10 multi-player video game that takes place in a virtual world. Epic Games hosted a series of online  
11 concert events in *Fortnite* concurrently attended by tens of millions of participants. Epic Games  
12 used—without rights or relevant permissions—the inventions claimed in the ’605 Patent and  
13 derived substantial value from this infringement. Utherville Gaming brought this action to  
14 remedy’s Epic Games’ infringement of the ’605 Patent.

15  
16 **B. CLAIMS ASSERTED**

17 Utherville Gaming asserts that Epic Games infringed the ’605 Patent under 35 U.S.C. §  
18 271(a). The Travis Scott and Ariana Grande concert experiences directly infringed claims 2, 5 and  
19 8 of the ’605 Patent. Utherville Gaming seeks damages adequate to compensate for Epic Games’  
20 infringing activities in an amount to be determined at trial, together with interests and costs.

21  
22 **C. NAMED PARTIES AND RELEVANT THIRD-PARTIES**

23 **1. Plaintiff Utherville Gaming LLC**

24 Plaintiff Utherville Gaming owns various virtual worlds patents for purposes of a licensing  
25 program related to the same. The goal of Utherville Gaming’s patent licensing program is to  
26 obtain fair value for the inventions disclosed in its patents from any companies using those  
inventions. Utherville Gaming financially benefits from this program while third parties are

1 encouraged to invent and innovate, which is core to the U.S. intellectual property system.

2  
3 **2. Epic Games, Inc.**

4 Epic Games is headquartered in Cary, North Carolina. Epic Games created and operates  
5 *Fortnite*, the virtual world in which the accused concert events took place. Originally designed as  
6 a first-person shooter, the *Fortnite* virtual world expanded into hosting large-scale events. Epic  
7 Games' *Fortnite* virtual world hosted concert events by musical artists Marshmello, Metallica,  
8 Eminem, and as relevant to the present dispute—Travis Scott and Ariana Grande.

9 In April 2020, Epic Games hosted the Travis Scott concert series. Over 12.3 million  
10 concurrent users attended the opening night of the event in *Fortnite*. More than 27 million unique  
11 participants attended the series of concert events. In August 2021, Epic Games hosted an Ariana  
12 Grande concert series in the *Fortnite* virtual world. 28 million unique users attended the series of  
13 concert events; 10.7 million attended the opening night.

14  
15 **3. Utherverse Digital, Inc.**

16 Third-party Utherverse Digital, Inc is the original owner of the '605 Patent. Utherverse  
17 Digital believed its patent rights were being infringed by Epic Games through certain of its online  
18 concert events. Utherverse Digital sought assistance for enforcement of the exclusive patent rights  
19 of the '605 Patent. Utherverse Gaming was formed as a licensing partner for certain of Utherverse  
20 Digital's patents, including the '605 Patent. Utherverse Digital remains an active business with a  
21 focus on product development while Utherverse Gaming handles licensing and enforcement by  
22 way of assignment of the '605 Patent.

23  
24 **II. PROCEDURAL HISTORY**

25 Utherverse Gaming commenced this action on June 11, 2021 and alleged infringement of  
26 four patents by Epic Games: the '605 Patent and U.S. patent numbers 8,276,071 (the "'071  
Patent"); 8,812,954 (the "'954 Patent"); and 9,123,157 (the "'157 Patent"). *See generally* Dkt. 1.

1 Epic Games filed a motion to dismiss on August 5, 2021 alleging each of the asserted patents  
2 lacked statutory subject matter under Section 101. Dkt. 34. Following briefing and oral argument,  
3 Magistrate Judge Fricke issued a November 2, 2021 report and recommendation denying Epic  
4 Games' motion. Dkt. 49. The report and recommendation found the '605 Patent to be plausibly  
5 alleged to "contain[] an inventive concept because [it] establishe[s] non-conventional and non-  
6 generic arrangements of known computer components and virtual-reality components." *Id.* at  
7 23:21-23. The Court adopted the report and recommendation on January 3, 2022. Dkt. 57.

8 Epic Games answered Utherverse Gaming's complaint and lodged counterclaims January  
9 18, 2022. Dkt. 58. Utherverse Gaming answered those counterclaims February 8, 2022. Dkt. 59.  
10 The parties engaged in claim construction discovery, submitted claim construction briefing, and  
11 participated in oral argument prior to the Court issuing its claim construction order on October 20,  
12 2022. *See* Dkt. 133. Utherverse Gaming sought reconsideration of the order on November 3,  
13 2022; the Court denied Utherverse Gaming's request on November 15, 2022. Dkts. 137, 146. A  
14 stipulated motion for entry of judgment of non-infringement of the '954 Patent and '157 Patent  
15 was lodged by the parties on February 16, 2023 resulting from certain constructions in the claim  
16 construction order. Dkt. 179. Both parties reserved all rights of appeal and tolled the time for  
17 noticing the same. *Id.* at 4:2-6, 10-11.

18 The parties participated in extensive written, document, and deposition discovery,  
19 including third-party discovery. Various discovery motions and discovery conferences were filed  
20 and held during this period, including multiple unopposed requests by Epic Games to amend its  
21 invalidity contentions. Notwithstanding repeated courtesy and cooperation by Utherverse Gaming  
22 in allowing Epic Games to amend its contentions unopposed, Epic Games required Utherverse  
23 Gaming to file an opposed motion to amend its infringement contentions on May 11, 2023 (Dkt.  
24 209); Epic Games then sought to exclude Utherverse Gaming's infringement theories on May 25,  
25 2023 (Dkt. 231). The Court heard oral argument on June 16, 2023 on the two motions as well as  
26 an opposed motion by Epic Games to amend its answer and counterclaims to allege incorrect  
inventorship and unenforceability. *See* Dkts. 238, 272. Magistrate Judge Fricke issued a report

1 and recommendation on July 10, 2023; the report granted Utherverse Gaming's motion to amend  
2 its infringement contentions and concurrently denied Epic Games' motion to exclude Utherverse  
3 Gaming's supposed new infringement theories. Dkts. 277, 280. Magistrate Judge Fricke also  
4 recommended allowing for Epic Games' amended answer and counterclaims. Dkt. 280. The Court  
5 adopted the report and recommendations. Dkts. 285, 286.

6 Fact and expert discovery closed and the parties commenced Daubert and summary  
7 judgment practice. Utherverse Gaming sought to exclude certain testimony of Benjamin Ellinger,  
8 which was granted in part for want of an adequate methodology. Dkts. 294, 367. Epic Games  
9 sought to exclude testimony of Michele Riley; the Court denied the motion. Dkts. 309, 371.  
10 Utherverse Gaming moved for summary judgment of infringement of the '071 Patent and  
11 confirmation of correct inventorship, which would obviate any claim of unenforceability due to  
12 inequitable conduct. Dkt. 314. Epic moved for summary judgment of non-infringement of both  
13 the '071 and '605 Patents as well as invalidity of the '071 Patent under Section 101, and failure to  
14 properly mark the '071 Patent under Section 287 of the Patent Act. Dkt. 300.

15 The Court ultimately granted Epic Games' motion for summary judgment of non-  
16 infringement and invalidity of the '071 Patent. Dkt. 369 at 1:15-16, 1:18-20. Utherverse Gaming  
17 objected for want of a proper Section 101 analysis as required by current Supreme Court precedent,  
18 which also improperly affected the Court's findings of non-infringement. Dkt. 375. Utherverse  
19 Gaming's motion for summary judgment of infringement was correspondingly denied. Dkt. 373  
20 at 2:1-2. The Court granted Utherverse Gaming's motion as to inventorship, unenforceability, and  
21 marking. *Id.* at 2:3-6; *see also* Dkt. 369 at 1:21-23. The Court denied Epic Games' motion as to  
22 the '605 Patent thus setting the present dispute for trial. Dkt. 369 at 1:17. Epic Games also  
23 attempted to stay the action given its filing of a March 14, 2023 request for *ex parte* re-  
24 examination; the Court denied the motion. Dkts. 318, 346.

25 The parties prepared for trial including filing motions *in limine* on August 8, 2024 and a  
26 proposed pre-trial order on September 6, 2024. Dkts. 407, 413, 418. The parties later stipulated a  
resolution to certain motions *in limine* on September 10, 2024 (Dkt. 425) including:

- excluding introduction of certain Epic Games top line revenue information by Utherverse Gaming;
- suggesting infringement by Utherverse Gaming at trial of any experiences other than the currently accused Travis Scott and Ariana Grande concert experiences;
- referencing any involvement by any inventor in the adult content or related industries by Epic Games;
- referencing the adult nature or making any suggestion of pornographic content pertaining to Utherverse Digital's Red Light Center (RLC) platform by Epic Games;
- use of pejorative or derogatory terms to characterize Utherverse Gaming by Epic Games;
- referencing investments in Utherverse Gaming by various third-parties;
- referencing the stipulated judgment of non-infringement;
- referencing the summary judgment motion decisions; and
- referencing any investigation into either party by any governmental authority.

The Court held a pre-trial conference on September 11, 2024, but held the trial over ultimately until May 12, 2025. Dkt. 427. Following that pre-trial conference, the Court issued a September 20, 2024 decision on the remaining motions *in limine* (Dkt. 431) as follows:

- allowing for certain inventor testimony regarding the '605 Patent, but instructing the parties to "steer clear" of any questioning seeking to elicit testimony or argument "based on a construction other than the Court's";
- prohibiting witnesses from "discuss[ing] the reasoning of the Order unless a party can persuade the Court that such is necessary to rebut expert testimony" while also noting that "specific issues that arise during testimony at trial" would be deferred;
- allowing testimony on certain prior combinations so long as they were disclosed in the invalidity report of Benjamin Ellinger;
- allowing for a defense of indefiniteness and lack of enablement by Epic Games; and

- prohibiting re-argument of issues decided on *Daubert* by Epic Games as to Michelle Riley.

### **III. STATEMENT OF FACTS**

#### **A. THE '605 PATENT**

The claimed invention of the '605 Patent relates to virtual computer-generated environments through which users can navigate. Mr. Brian Shuster—one of the co-inventors for the '605 Patent—has conceived and developed similar forward-thinking Internet technologies for much of his career as reflected by his more than 100 patents. To wit, the inventors of the '605 Patent conceived a new, useful, and nonobvious way of playing back a recorded experience in a virtual worlds system.

#### **B. TECHNOLOGIES USED IN THE ACCUSED EVENT EXPERIENCES**

Epic Games used multiple technologies in the design, creation, production, and presentation of the accused Travis Scott and Ariana Grande concert experiences. Millions of concurrent users simultaneously enjoyed these concert experiences across thousands of instances of a scene. At the heart of these enabling technologies is Unreal Engine. Epic Games used Unreal Engine not only in the design, creation, production, and presentation of the two accused concert experiences, but the entirety of the *Fortnite* virtual world.

##### **1. Unreal Engine**

Unreal Engine is a suite of tools developed by Epic Games for creating virtual worlds. Unreal Engine allows software developers to build detailed 3D environments, characters, and objects for realistic virtual world experiences. Unreal Engine can render graphics in real-time, meaning you can instantly see changes as you develop your virtual world. Unreal Engine is cross-platform, meaning that it supports multiple end-user platforms; this includes PCs, Macs, consoles, and mobile devices. It is therefore easier to release Unreal Engine generated content on various

1 devices, which in turn allows for a greater distribution of content and engagement with end-users.  
2 Unreal Engine is also user-friendly; beginners and experienced developers alike can efficiently  
3 create virtual world experiences using Unreal Engine.  
4

## 5 **2. Dedicated Servers**

6 Epic Games also uses technologies known as dedicated servers to manage user demand in  
7 presenting the accused concert experiences. Through manual or dynamic adjustment of player-  
8 driven demand, Epic Games can manage server resources. Through management of server  
9 resources, Epic Games ensures that concert experiences are consistently provided while optimizing  
10 infrastructure costs.

11 Epic Games hosted the accused concert events on dedicated server instances that run  
12 *Fortnite* game sessions in corresponding virtual world environments. Instances accommodating  
13 sessions are hosted under contract with third-party cloud service providers. Each of these instances  
14 and the Epic Games code executing thereon manage game logic, player connections, and other  
15 virtual world data. These servers ensure that the virtual worlds run smoothly, with minimal  
16 latency, and can account for variable and fluctuating demand. The dedicated server instances keep  
17 track of *inter alia* collision detection relative blocking volumes where users on client devices  
18 engage (or attempting to engage) with various virtual world objects.  
19

## 20 **3. Blocking Volumes**

21 Blocking volumes are a type of invisible collision geometry. Blocking volumes are used  
22 to create simple boundaries, barriers, or collision areas within a virtual world. Blocking volumes  
23 are often used to prevent users from accessing certain parts of the environment (such as a concert  
24 stage), passing through a virtual object (such as a building or a tree), or falling off the virtual world  
25 map (i.e., the ‘edge’ of the virtual world).

26 Epic Games utilized blocking volumes to control and monitor human-controlled avatar  
movement and their interactions or collisions with objects within a scene. Human-controlled



1 avatars could move about a concert venue, but only within limits defined by Epic Games. Blocking  
2 volumes defined various areas of a scene in a virtual world that participants could approach but be  
3 prevented from entering. Blocking volumes can be tune-scaled and shaped to fit any intended  
4 area; they can create invisible walls, floor collisions, or other types of interaction without adding  
5 visible geometry to the scene. Blocking volumes can be created (spawned), defined, and destroyed  
6 (removed) through Blueprints and associated source code with each accused concert experience.

#### 7 8 **4. Blueprints**

9 Unreal Engine allows users to visually script a virtual world experience by creating and  
10 editing complex functionality without using traditional source code programming. Unreal Engine  
11 does so through its Blueprint Visual Scripting system, more commonly known as “Blueprints.”  
12 Blueprints are a complete scripting system that facilitates the creation of virtual world experiences  
13 without having to write source code in a traditional programming language like C++. Blueprints  
14 offer a node-based interface that allows users to manage complex functionality using a visually  
15 intuitive and accessible drag-and-drop method. Blueprints can define behavior and properties of  
16 objects beyond blocking volume like opening doors, triggering cutscenes, or creating virtual  
17 environments themselves in addition to setting game rules, game states, and managing user  
18 interface elements.

#### 19 20 **5. Matchmaking**

21 Epic Games manages virtual worlds including *Fortnite* in conjunction with a series of  
22 backend system technologies known as the Master Control Program (MCP) and session  
23 matchmaking. The MCP maintains user state, world settings, and other user data. Session  
24 matchmaking assigns participants to online multiplayer experiences considering a variety of  
25 factors including population control based on threshold events.

## 6. The Sequencer Tool

The sequencer tool in Unreal Engine enables the creation of scripted events (sequences) in a virtual world environment. The sequences result from keyframing, which allows for the creation of intricate and dynamic sequences with precise control. Keyframes, when placed along a timeline, create an animation by interpolating between values. Keyframes are the building blocks of cinematic sequences and control over an object's behavior during playback of the sequence. Unreal Engine assets, including sequence data, are stored in what are known as *uasset* binary files. These binary files determine the movements and motions of performers in the scene. The *uasset* binary files were played back in the same way for each instance in the *Fortnite* virtual world for each of the Travis Scott and Ariana Grande concert experiences, which were created and recorded weeks or months before the events unfolded in *Fortnite*.

## IV. ARGUMENT

### A. INFRINGEMENT OF THE '605 PATENT BY EPIC GAMES

Utherville Gaming will present evidence at trial proving by a preponderance of the evidence that Epic Games infringes Claims 2, 5 and 8 of the '605 Patent. Utherville Gaming will present *inter alia* the testimony of Brian Shuster and Aaron Burch—the named inventors of the '605 Patent—as well as the testimony of its technical expert, Dr. Craig Rosenberg. This testimony and evidence will show that the required elements of each of claims 2, 5, and 8 are satisfied by each of the Travis Scott and Ariana Grande concert experiences. Utherville Gaming will also present evidence at trial showing that Epic's non-infringement position is unavailing.

### B. DAMAGES DUE TO INFRINGEMENT OF THE '605 PATENT BY EPIC GAMES

Utherville Gaming will present evidence at trial proving by a preponderance of the evidence its right to damages from Epic Games and adequate to compensate for Epic Games' infringement of the '605 Patent. Michelle Riley, an economics and licensing expert retained by Utherville Gaming will provide at least this testimony. Ms. Riley conducted a 'hypothetical

1 negotiation' with Epic Games in conducting her damages analysis. The negotiation assumes  
2 infringement and validity and that an agreement between the parties must be reached. Ms. Riley  
3 conducted this hypothetical negotiation from the time frame of April 2020, which is when Epic  
4 Games first began infringing the '605 Patent. Ms. Riley then calculated the appropriate royalty  
5 base after considering Epic Games' own financial information. Ms. Riley applied a reasonable  
6 royalty rate to that amount to arrive at her damages position.

### 7 8 **C. VALIDITY OF THE '605 PATENT**

9 Epic Games carries the burden of showing that the '605 Patent is invalid by clear and  
10 convincing evidence. Epic Games cannot meet this burden. The presumption of validity of the  
11 '605 Patent allowed for by the patent statute should be left undisturbed. The '605 Patent is valid  
12 and Epic Games should be held liable for its infringement of the patent.

13 David Crane will, on behalf of Uthervse Gaming, rebut any suggestions of invalidity  
14 offered by Epic Games' expert, Benjamin Ellinger. Mr. Crane possesses over 40 years of work  
15 experience. This includes the creation and publishing of more than 90 commercial game products  
16 and more than 75,000 working hours of video game development. Mr. Crane was one of the  
17 earliest engineers at Atari, which revolutionized home gaming. Mr. Crane later co-founded one  
18 of the world's largest video game publishers—Activision.

19 Mr. Crane will rebut any suggestion that the '605 Patent lacks patent eligible subject  
20 matter. Mr. Ellinger failed to consider all the recited claim elements of claims 2, 5, and 8, either  
21 individually or as an ordered combination, which is the proper basis for conducting a Section 101  
22 analysis. Mr. Ellinger instead oversimplified important claim elements to reach the incomplete  
23 conclusion that the claimed invention represents little more than off-the-shelf components that are  
24 used in accordance with their "ordinary, everyday use."

25 Mr. Crane will further demonstrate that Epic Games' primary anticipatory reference—  
26 Starcraft II—fails to disclose every element of the asserted claims. While Mr. Eillinger had access  
to the source code for Starcraft II, he failed to correctly interpret that code. While Epic Games

1 had access to engineers at Activision that produced the Starcraft II source code, those engineers  
2 were only asked to validate the authenticity of that code—not any of Mr. Ellinger’s opinions. Mr.  
3 Ellinger ultimately and incorrectly interpreted the source code. Mr. Ellinger therefore relies on  
4 Internet postings that do not constitute the basis for a proper expert opinion as was found relative  
5 certain of his opinions in the now out-of-suit ’071 Patent.

6 The same failures by Mr. Ellinger can be highlighted relative MASSIVE-3, which is  
7 another purported anticipatory reference proffered by Epic Games. Mr. Ellinger again had access  
8 to source code and again misinterpreted the same. Had Mr. Ellinger sought to verify his opinions  
9 with the purported author of that code rather than merely verify the authenticity of that code, his  
10 error would have been acknowledged and perhaps corrected. Mr. Ellinger again relies on articles  
11 about a product tangentially related to the source code—articles that again fail to provide a  
12 sufficient basis for a proper expert opinion.

13 The various references on which Mr. Ellinger opines concerning obviousness also fail to  
14 prove invalidity by clear and convincing evidence. Each of those references—either individually  
15 or alone—fail to compensate for the failed or misinterpreted teachings of Starcraft II or  
16 MASSIVE-3. Nor does Mr. Ellinger provide sufficient motivation to combine those references,  
17 which teach away or would be inoperable if combined in the manner suggested.

18 And while the Court will allow for discussion of *theories* related to indefiniteness and  
19 enablement per its decision on certain motions *in limine*, Epic Games has no *evidence* to present  
20 in support of those theories. Mr. Ellinger was aware of the concepts of indefiniteness and  
21 enablement. He testified to such theories relative the ’071 Patent. Mr. Ellinger offered no such  
22 opinions as to the ’605 Patent. Mr. Ellinger expressly confirmed the lack of said theories or proof  
23 during his deposition. Epic Games has no alternative source of evidence to advance these theories,  
24 which ultimately will fail.

1 **V. CONCLUSION**

2 Epic Games infringed the '605 Patent. Utherverse Gaming is entitled to damages for Epic's  
 3 infringement. Epic Games cannot obviate a finding of infringement and financial liability through  
 4 invalidation of the '605 Patent; Epic Games cannot meet its burden of proof to overcome the  
 5 presumption of validity.

6 DATED this 21st day of April, 2025

Respectfully submitted,

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